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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ROSARIO VASQUEZ, DENNIS

ART UNIT PAPER NUMBER

2621

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/941,819

Applicant(s)

LARSON, DAVID R.

Examiner

Dennis Rosario-Vasquez

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amend. September 13, 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment was entered on September 13, 2004. Claims 1-11, 13-21 are pending.

Response to Arguments

2. Applicant's arguments, see amendment, pages 7-10, filed September 13, 2004, with respect to claims 1 and 13 have been fully considered and are persuasive. The rejection of claims 1 and 13 have been withdrawn.

Applicant's arguments, see amendment, pages 7-10 filed September 13, 2004, with respect to the rejection(s) of claim(s) 1 and 13 under Lin et al. (US Patent 6,211,868 B1) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Betrisey et al. (US Patent 6,360,023 A).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-10,¹³~~12~~-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Betrisey et al. (US Patent 6,360,023 B1).

Regarding claim 1, Betrisey et al. discloses a document processing system for modifying image data, the image data including a foreground component and a background component, said document processing system comprising:

a) a document processing device (A printer in col. 12, line 31 is used to print a document.) operative to acquire image data (The printer prints data using image data from fig. 12,num. 837:TEXT OUTPUT.) corresponding to a document (TEXT OUTPUT corresponds to document.) by scanning ("scanner" in col. 12, line 19) the document (A scanner scans a document to input image data of fig. 12, num.837: TEXT OUTPUT.); and;

b) an image enhancement system (Fig. 11, num. 720 is a "personal computer" in col. 11, lines 38,39.) configured (via fig. 11, num. 746:SERIAL PORT INTERFACE) to communicate with the document processing device ("printer" in col. 12, line 31 is configured to communicate with fig. 11,num. 720 via a line between numerals 720 and 754, which is an output device that corresponds to the printer in col. 12, lines 29-31.) and receive the image data acquired (fig. 12,num. 837:TEXT OUTPUT is received or stored in fig. 11,num. 720.), receive information corresponding to a request for modification (A user enters "commands" and "information" for fig. 11, num. 720 in col. 12, line 15.) of the image data (fig. 12, num. 837:TEXT OUTPUT), and, in response to the request ("commands" in col. 12, line 15), modify ("Bloated" in col. 13, line 47.) the image data (fig. 12, num. 837:TEXT OUTPUT is bloated or "increased" or "transition" in size in col. 13, lines 44,47.) by increasing contrast ("increase contrast" in abstract.) between the foreground component and the background component (An "alpha" value is used to increase the contrast between the foreground and background components in col. 3, lines 41-43 and in abstract.) and altering lightness of both the foreground component and the background component (The alpha values are used to "control...intensity values...as a function of [the] foreground and background (col. 3, lines 43-47.)."),

c) wherein said document processing device (A "printer" in col. 12, line 31.) is configured to produce a document (The printer prints a document corresponding to the bloating modification.) with the image data modified (fig. 12, num. 837:TEXT OUTPUT is bloated or "increased" or "transition" in size in col. 13, lines 44,47.) by the image enhancement system (Fig. 11, num. 720 is a "personal computer" in col. 11, lines 38,39 that performs the bloating operation.).

Regarding claim 2, Betrisey et al. discloses the document processing system of claim 1, further comprising:

a) an actuator (Fig. 11,num. 740 is a keyboard.) communicating with said image enhancement system (Fig. 11, num. 720 is a "personal computer" in col. 11, lines 38,39.), said actuator having an actuated state corresponding to the request for modification (A user enters "commands" and "information" for fig. 11, num. 720 in col. 12, line 15.) of the image data (fig. 12, num. 837:TEXT OUTPUT).

Regarding claim 3, Betrisey et al. discloses the document processing system of claim 2, wherein said actuator (Fig. 11,num. 740 is a keyboard.) is implemented via a graphical user interface (Fig. 12,num. 801: GRAPHICS DISPLAY INTERFACE is used with the keyboard.).

Regarding claim 4, Betrisey et al. discloses the document processing system of claim 2 wherein said document processing device (A "printer" in col. 12, line 31.) includes said actuator (Fig. 11,num. 740 is a keyboard that is used to actuate a print command to the printer.).

Claim 5 is rejected the same as claim 4. Thus, argument similar to that presented above for claim 4 is equally applicable to claim 5.

Regarding claim 6, Betrisey et al. discloses the document processing system of claim 1, wherein said image enhancement system (Fig. 11, num. 720 is a "personal computer" in col. 11, lines 38,39.) is configured to modify the image data (fig. 12, num. 837:TEXT OUTPUT) incrementally (Alpha values," α " in fig. 13, are numerical values that are incremented to modify TEXT OUTPUT as shown in the table of fig. 13.), such that, at a first increment (The table of fig. 13 shows an increment of an " α value" from "1" to "2".), the image data (fig. 12, num. 837:TEXT OUTPUT) is modified by increasing contrast ("increase contrast" in abstract.) between the foreground component and the background component (An "alpha" value is used to increase the contrast between the foreground and background components in col. 3, lines 41-43 and in abstract.)

Regarding claim 7, Betrisey et al. discloses the document processing system of claim 6, at said first increment (The table of fig. 13 shows an increment of an " α value" from "1" to "2".), lightness of only one of the foreground component and the background component is increased (The alpha value can be set to "1" which indicates a increase or "control" of the foreground "luminous intensity values" in col. 3, lines 43-53 and vice versa for the background component in col. 3, line 55-57.).

Claims 8,9,18 and 19 are rejected the same as claim 7. Thus, argument similar to that presented above for claim 7 is equally applicable to claims 8,9,18 and 19.

Regarding claim 10, Betrisey et al. discloses the document processing system of claim 1, wherein said image enhancement system (Fig. 11, num. 720 is a "personal computer" in col. 11, lines 38,39.) is configured to separate (Fig. 11,num. 720 uses blending techniques in col. 6, lines 3-5 as described with fig. 3 for separating color from intensity in col. 4, lines 57-61.) the image data (fig. 12, num. 837:TEXT OUTPUT) into a color component ("subsequently applied [colors]" in col. 3, line 46.) and a lightness component ("luminous intensity values" in col. 3, line 44) and modify only the lightness component (The "luminous intensity values are...corrected...(col. 4, lines 66,67.)" of the image data (fig. 12, num. 837:TEXT OUTPUT).

Claims 13 and 15 are rejected the same as claims 1 and 2. Thus, argument similar to that presented above for claims 1 and 2 are equally applicable to claims 13 and 15.

Claim 14 is rejected the same as claims 3 and 4. Thus, argument similar to that presented above for claims 3 and 4 are equally applicable to claim 14.

Claim 16 is rejected the same as claim 6. Thus, argument similar to that presented above for claim 6 is equally applicable to claim 16.

Claim 17 are rejected the same as claim 7. Thus, argument similar to that presented above for claim 7 is equally applicable to claim 17.

Claim 20 is rejected the same as claim 10. Thus, argument similar to that presented above for claim 10 is equally applicable to claim 20.

Regarding claim 21, Bertrisey et al. discloses the document processing system of claim 2, wherein the actuator (Fig. 11, num. 740 is a keyboard.) is the only actuator (A user enters commands using the keyboard to request a modification. Note that there is only one input in fig. 11, num. 746: SERIAL PORT INTERFACE from which to enter commands with a keyboard.) responsible for providing the request for modification (A user enters "commands" and "information" for fig. 11, num. 720 in col. 12, line 15.) of the image data (fig. 12, num. 837:TEXT OUTPUT).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Betrisey et al. (US Patent 6,360,023 B1) in view of Schreiber (US Patent 4,500,919 A).

Regarding claim 11, Betrisey et al. does teaches the document processing system of claim 10, wherein said image enhancement system (Fig. 11, num. 720 is a "personal computer" in col. 11, lines 38,39.) is configured to receive the image data in RGB format (fig. 5 shows a RGB format for the FOREGROUND COLOR.), convert ("converts them into a signal format" in col. 14, line 57.) the image data (fig. 5 shows a RGB format for the FOREGROUND COLOR.) to one of Lightness Hue Chroma and Lightness a b format ("signal format" in col. 14, line 57.), and convert the image data to

RGB format after modification ("signal format" in col. 14, line 57. Note that the signal format corresponds to a particular "display device" 754 of fig. 11 in col. 14, line 58.).

Betrissey et al. does not teach one of "Lightness Hue Chroma and Lightness ab format".

However, Schreiber teaches an image enhancement system (fig. 3) is configured to receive the image data in RGB format (RGB input data of fig. 3), convert the image data to Lightness Hue Chroma format (Fig. 3, num. 34: RGB to LC1C2, which can be substituted with LHS or luminance, hue, and saturation.), and convert (via numerals 35-39) the image data (RGB input data of fig. 3) to RGB format (The output of fig. 3 is converted to RGB format.) after modification (35 of fig. 3 has a separate process to modify shadows as mentioned in col. 8, lines 38-41.).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Betrissey et al.'s teaching of conversion to a signal format with Schreiber's teaching of converting to LHS or LC1LC2, because Schreiber's conversion teaching can "correct for...shadows...(Schreiber col. 8 lines 41,42)."

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Rosario-Vasquez whose telephone number is 703-305-5431. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Boudreau can be reached on 703-305-4706. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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